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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,844	12/11/2003	Michel Gillet	944-001.123	9020

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EXAMINER

PHAN, RAYMOND NGAN

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/733,844

Applicant(s)

GILLET, MICHEL

Examiner

Raymond Phan

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### **Part III DETAILED ACTION**

#### ***Notice to Applicant(s)***

1. This application has been examined. Claims 1-31 are pending.
2. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2111.

#### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-31 are rejected under 35 U.S.C. § 102(e) as being anticipated by Moro (US Pub No. 2003/0056050).

In regard to claims 1, 13, 22, 27, 30, Moro discloses a method for enhancing performance of an electronic device having a host module operatively connected to a memory device (i.e. SD card) via a bus system (see figure 6), the bus system comprising a plurality of signal lines and N data lines for conveying signals and data between the host module and the memory device (see figure 6, para. 0057), wherein the host module is operable in a plurality of data modes (i.e. SPI, SD-4), the plurality of modes including at least one data mode (i.e. SPI and/or SD-1) that use M data lines to convey data between the host module and the memory device, with M smaller than N (N-M) unused data lines in the bus system (see figure 6, paras 0055-0059), the method comprising the step of providing in the memory device a module for generating at least one further signal (see figure 6, paras. 55-57); and causing to exchange of data, based on the at least one further signal, between the host module and the memory device using at least one of unused data lines even when the host module is operated in the at least one data mode (see figure 6, paras. 0055-0059).

In regard to claims 2, 15, 24, 28, Moro discloses wherein the further signal comprising a command signal, conveyed to the host module on another one of unused data lines (see figure 6, para 0055).

In regard to claims 3, 16, 23, 29, Moro discloses wherein the further signal comprising a clock signal, conveyed to the host module on another one of unused data lines (see figure 6, para 0055).

In regard to claim 4, Moro disclose wherein N is equal to 8 (DAT3-DAT0(#1) and DAT3-DAT0(#2)) and M is equal to 4 (i.e. in SD-1bit and SPI

modes for card #1 and #2 respectively), leaving 4 unused data line (see figures 5-6, paras 0054-0057), and wherein at least one further signal comprising a clock signal conveyed from the memory device to the host module on another one of the unused data lines, and a command signal, conveyed between the host module and the memory device on yet another one of the unused data lines (see figures 5-6, paras 0055-0057).

In regard to claim 5, Moro discloses wherein at least one of the unused data lines comprising two unused data line for carrying out the exchange of data in a differential manner (see figures 5-6, paras 0055-0057).

In regard to claims 6, 19, 31, Moro discloses wherein the electronic device is operable in a serial peripheral interface (SPI) mode (see figure 5) and the bus system further comprising a further signal line for conveying a chip select (CS) signal from the host module to the memory device and wherein further signal is conveyed from the memory device to the host module on the further signal line (see figure 5-6, paras 0055-0057).

In regard to claims 7, 20, Moro discloses the further signal comprising a command signal (see figure 5).

In regard to claims 8, Moro discloses wherein N is equal to 8 and M is equal to 4, leaving 4 unused data lines for carrying out the exchange of data (see figures 5-6, paras 0055-0057).

In regard to claims 9, 11, Moro discloses wherein exchange of data is carried out in two differential pairs (see figure 5).

In regard to claim 10, Moro disclose wherein N is equal to 8 (DAT3-DAT0(#1) and DAT3-DAT0(#2)) and M is equal to 1 (i.e. in SD-1bit and SPI modes for card #1 and #2 respectively), leaving 7 unused data line (see figures 5-6,

paras 0054-0057), and wherein at least one further signal comprising a clock signal conveyed from the memory device to the host module on another one of the unused data lines, and a command signal, conveyed between the host module and the memory device on yet another one of the unused data lines (see figures 5-6, paras 0055-0057).

In regards to claim 12, Moro discloses wherein exchange of data is carried out on two or more different unused data line (see figures 5-6).

In regard to claim 14, Moro discloses wherein the memory device comprising an embedded module 14 for generating the at least one signal (see figure 2, paras 0039-0040).

In regard to claim 17, Moro discloses wherein the electronic device is a mobile phone (see para 0005).

In regard to claim 18, Moro discloses wherein the electronic device is a PDA (see para 0005).

In regard to claim 21, Moro discloses the program (see paras 0039-0040), responsive to the further signal, for processing the data exchanged between the host module and the memory device on at least one of the unused data lines (see para 0040).

In regard to claims 25-26, Moro discloses the module for generating at least further signal comprising a micro-controller or input/output device 14 (see figure 2, paras 0039-0040).

### ***Conclusion***

6. All claims are rejected.
7. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

**Wallace et al. (US No. 6,824,063)** disclose a use of small electronic circuit cards with different interface in an electronic system.

**Nishizawa et al. (US No. 6,896,523)** disclose an IC card.

**Nishizawa et al. (US Pub No. 2001/0009505)** disclose an IC card.

**Petty et al. (PCT No. 00/54140)** disclose a multiplexing pins of an PC card for providing audio communication between the PC card and the host computer.

**Sekiguchi et al. (EPO No. 0409241A1)** disclose an IC card with additional terminals and method of controlling the IC card.

**Inomata et al. (EPO No. 1271328A1)** disclose a variable-mode PC card and input/output control device of PC card.

### **SD Memory Card Specification**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (571) 272-3630. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Primary, Paul Myers can be reached on (571) 272-3639 or via e-mail addressed to paul.myers@uspto.gov. The fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see [hop://pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 central telephone number is (571) 272-2100.

**Raymond Phan**  
**June 11, 2005**

